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ABSTRACT

Part of a volume which explores current issues in service delivery to infants and toddlers (ages birth to 3) with handicapping conditions, this chapter defines the team concept as it relates to the field of early intervention and describes three approaches (multidisciplinary, interdisciplinary, and transdisciplinary) commonly used to organize services. The transdisciplinary model is explored in detail and recommended as a system which sets high standards for team collaboration and remedies many of the problems associated with the other two models. Developed in the mid-1970's in response to budget constraints, the transdisciplinary (TD) model is described as a team approach that crosses and recrosses disciplinary boundaries. Separate but related processes which comprise the stages of TD (summarized as "role release") are discussed: role extension, role enrichment, role expansion, role exchange, role release, and role support. TD program components are described in detail: intake, assessment (using an "arena" approach), program planning (beginning with the development of an individualized family service plan), program implementation (emphasizing careful selection of the primary service provider), and reassessment. Implications for staff selection are discussed, and benefits of the model for child and family are summarized. References are appended. (JW)

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# 8.
# Early Intervention Team Approaches: The Transdisciplinary Model

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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

❑ The team approach is becoming more widespread (Fewell, 1983) and is gaining support among early intervention professionals as the way to serve young children with special needs and their families. The 1975 passage of the Education for All Handicapped Children Act (Public Law 94-142) and its requirements that assessments and program plans be developed by professionals from multiple disciplines and by the parents made the team approach the standard for school-age special education programs. Public Law 99-457, the Education of the Handicapped Act Amendments of 1986, further endorsed this approach by extending the recommendations for team assessments and program planning to infants and toddlers and their families. As a result of the new legislation and the growing acceptance of the team approach to early intervention, professionals in the field are beginning to look systematically at team functioning.

This chapter defines the concept of team as it relates to the field of early intervention and describes three team approaches commonly used to organize services for infants with special needs and their families. These three approaches are the multidisciplinary, interdisciplinary, and transdisciplinary models. The transdisciplinary approach is explored in detail and recommended as a sound, logical, and valid system for offering coordinated and comprehensive services to infants and their families.

## *THE TEAM*

❑ The growing acceptance and implementation of the team approach are not solely the results of federal mandates. They also reflect early intervention professionals' view of human development that regards a child as an integrated and interactive whole, rather than as a collection of separate parts (Golin & Duncanis, 1981). The team approach also recognizes that the multifaceted problems of very young children are too complex to be addressed by a single discipline (Holm & McCartin, 1978). The complexity of developmental problems in early life (Fewell, 1983) and the interrelated nature of an infant's developmental domains are prompting early intervention specialists to recognize the need for professionals to work together as a team.

*Multifaceted problems of very young children are too complex to be addressed by a single discipline.*

Holm and McCartin (1978) described a team as "an interacting group performing integrated and interdependent activities" (p. 121). To be effective, a team must be more than a collection of individuals, each pursuing his or her own tasks. Fewell (1983) identified a major problem encountered by early intervention programs that are attempting to use a team approach: "Unfortunately, teams are made, not born" (p. 304). Teams cannot function effectively unless every member shares common goals and purposes, and unless the team leader provides continuing inspiration, support, and a vision of the team's mission. This truth is self-evident to any fan of team sports. Coaches and athletes devote their time to team building and practicing so that they can give their best performance at each game. Early intervention teams can learn from their example.

*Teams cannot function effectively unless every member shares common goals and purposes.*

Although team building and group dynamics are relatively recent concerns in the field of early intervention, organizational behavior specialists have long investigated these issues. During the late 1920s, researchers in the now classic Hawthorne studies discovered that the

essential elements in work productivity are group identity and cohesion among workers (Dyer, 1977). Since that time, organizational development research has recognized and acknowledged the need for team-building skills as a necessary prerequisite for successful teams:

> Everyone who works together needs to learn new, more effective ways of problem solving, planning, decision making, coordination, integrating resources, sharing information, and dealing with problem situations that arise. (Dyer, 1977, p. 24)

Only recently have early intervention professionals become aware of the need to examine the process of team functioning and prepare professionals to become team members and team leaders.

## EARLY INTERVENTION TEAM MODELS

❑ Early intervention teams have several factors in common. Most are composed of professionals representing a variety of disciplines: special education; social work; psychology; medicine; child development; and physical, occupational, and speech and language therapy. Teams also involve the family in varying ways and degrees. Team members share common tasks including the assessment of a child's developmental status and the development and implementation of a program plan to meet the assessed needs of the child and, sometimes, of the family.

*Teams are composed of professionals representing a variety of disciplines.*

*Teams involve the family.*

What usually distinguishes early intervention teams from one another is neither composition nor task, but rather the structure for interaction among team members. Three service delivery models that structure interaction among team members have been identified and differentiated in the literature: multidisciplinary, interdisciplinary, and transdisciplinary (Fewell, 1983; Haynes, 1983; Linder, 1983; Peterson, 1987; United Cerebral Palsy National Collaborative Infant Project, 1976). Woodruff and Hanson (1987) have illustrated the similarities and differences in these team interaction models as they relate to early intervention program components. (See Figure 1.)

## MULTIDISCIPLINARY TEAMS

❑ On multidisciplinary teams, professionals from several disciplines work independently of each other (Fewell, 1983). Peterson (1987) has compared the mode of interaction among members of multidisciplinary teams to parallel play in young children: "side by side, but separate" (p. 484). Although multidisciplinary team members may work together and share the same space and tools, they usually function quite separately.

*Multidisciplinary team members usually function quite separately.*

Early intervention teams using this approach usually conduct assessments in which the child is seen and evaluated separately by each team member only in his or her own area of specialization. For example, the educator uses an assessment instrument specifically designed to measure cognitive functioning, while the physical therapist uses a gross motor instrument to assess the level of motor functioning. Upon completion of the assessments, team members develop the part of the service plan related to their own disciplines, and then each member implements the resulting intervention activities. The structure for inter-

*Figure 1. Three Models for Early Intervention*

| | **Multidisciplinary** | **Interdisciplinary** | **Transdisciplinary** |
|---|---|---|---|
| Assessment | Separate assessments by team members | Separate assessments by team members | Team members and family conduct a comprehensive developmental assessment together |
| Parent Participation | Parents meet with individual team members | Parents meet with team or team representative | Parents are full, active, and participating members of the team |
| Service Plan Development | Team members develop separate plans for their discipline | Team members share their separate plans with one another | Team members and the parents develop a service plan based upon family priorities, needs, and resources |
| Service Plan Responsibility | Team members are responsible for implementing their section of the plan | Team members are responsible for sharing information with one another as well as for implementing their section of the plan | Team members are responsible and accountable for how the primary service provider implements the plan |
| Service Plan Implementation | Team members implement the part of the service plan related to their discipline | Team members implement their section of the plan and incorporate other sections where possible | A primary service provider is assigned to implement the plan with the family |
| Lines of Communication | Informal lines | Periodic case-specific team meetings | Regular team meeting where continuous transfer of information, knowledge, and skills are shared among team members |
| Guiding Philosophy | Team members recognize the importance of contributions from other disciplines | Team members are willing and able to develop, share, and be responsible for providing services that are a part of the total service plan | Team members make a commitment to teach, learn, and work together across discipline boundaries to implement unified service plan |
| Staff Development | Independent and within their discipline | Independent within as well as outside of their discipline | An integral component of team meetings for learning across disciplines and team building |

*Source:* Woodruff, G. & Hanson, C. (1987). Project KAI, 77B Warren Street, Brighton, MA 02135. Funded by U.S. Department of Education, Special Education Programs, Handicapped Children's Early Education Program.

action among team members in the multidisciplinary approach does not foster services that reflect the view of the child as an integrated and interactive whole (Linder, 1983).

By design, professionals on multidisciplinary teams function as independent specialists. For the most part, professionals on these teams work independently and in isolation from one another (Bennett, 1982; Fewell, 1983). This in turn can lead to fragmented services for children and confusing or conflicting reports to parents.

Another concern about the multidisciplinary model is the lack of communication between team members that places the burden of

coordination and case management on the family. In contrast, both the interdisciplinary and the transdisciplinary approaches avoid the pitfalls of multidisciplinary service fragmentation by having the team develop a case management plan that coordinates both their services and the information that is presented to the family.

## *INTERDISCIPLINARY TEAMS*

❑ Interdisciplinary teams are composed of parents as well as professionals representing several disciplines. The difference between multidisciplinary and interdisciplinary teams lies in the interaction among team members. Interdisciplinary teams are characterized by formal channels of communication that encourage team members to share their information and discuss individual results (Fewell, 1983; Peterson, 1987). Regular meetings are usually scheduled to discuss shared cases.

*Interdisciplinary teams are characterized by formal channels of communication.*

Representatives of various professional disciplines separately assess children and families, but the team does come together at some point to discuss the results of their individual assessments and to develop plans for intervention. Generally, each specialist is responsible for the part of the service plan related to his or her professional discipline. The intervention plan is carried out by a single staff member with scheduled consultation or therapy from other specialists on the team.

Although this approach solves some of the problems associated with multidisciplinary teams, communication and interaction problems still exist within the interdisciplinary framework. Professional "turf" issues are a major problem (Fewell, 1983; Linder, 1983). Sometimes interdisciplinary team members do not fully understand the professional training and expertise of other team members who are from different disciplines. Many teams have discovered to their dismay that shared terminology does not always result in shared meaning (Howard, 1982).

*Communication and interaction problems still exist.*

Howard (1982) stated that in order for an interdisciplinary team to be successful, members must recognize and accept one another's differences:

> This requires an atmosphere of (a) acceptance of differences in skills; (b) acceptance of differences in approach; (c) willingness not to try to know everything; (d) an ability to call on others for assistance and ongoing knowledge; and (e) non-threatening opportunities for discussion in these areas. (p. 320)

Although Howard was addressing the highest goals of interdisciplinary team interaction, these principles serve as the foundation for a transdisciplinary team, too.

## *TRANSDISCIPLINARY TEAMS*

❑ Transdisciplinary (TD) teams are also composed of professionals from several disciplines. The TD approach attempts to overcome the confines of individual disciplines in order to form a team that crosses and recrosses disciplinary boundaries and thereby maximizes communication, interaction, and cooperation among team members.

Fundamental to this model are two beliefs: (a) children's development must be viewed as integrated and interactive and (b) children must be served within the context of the family. Since families have the greatest influence on their children's development, families are seen as part of the TD team and are involved in setting goals and making programmatic decision for themselves and their children. All decisions in the areas of assessment and program planning, implementation, and evaluation are made by team consensus. Although all team members share responsibility for the development of the service plan, it is carried out by the family and one other team member who is designated as the primary service provider.

### *Continuum of Interaction*

❑ Although these three forms of team interaction are frequently compared, another productive way of looking at them is to consider them as points on a continuum, moving from less to more interaction among disciplines. Figure 2 illustrates this view. The perspective of a continuum also acknowledges the progression of individual staff members (United Cerebral Palsy National Collaborative Infant Project, 1976) and of teams as they become more experienced and recognize the merits of transdisciplinary exchange. Seen in this light, the TD approach can be regarded as evolutionary for early intervention teams who, with experience and training, learn to increase interaction among members and among disciplines.

## *DESCRIPTION OF THE TRANSDISCIPLINARY APPROACH*

❑ The TD approach was developed in the mid-1970s by the United Cerebral Palsy (UCP) National Collaborative Infant Project. Like many innovations in early education and special education, it was developed in response to budget constraints as a way for understaffed and underfunded infant teams to pool their knowledge and skills to provide better, more cost-effective services to infants and families.

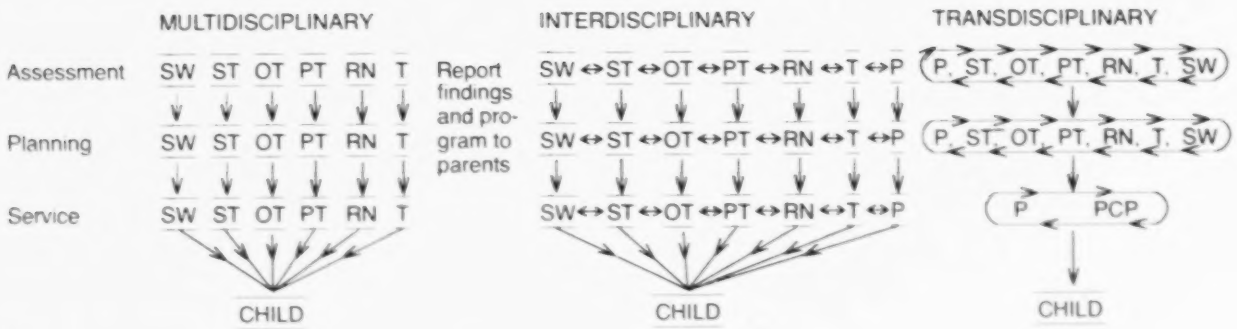
*TD team members plan and monitor services to all children and their families.*

The need to make the best use of professional staff time led the UCP Project to formulate a model in which all team members are involved in planning and monitoring services for all children and their families, but all are not involved in providing these services directly. The team uses its time together to plan an integrated program that is then implemented by the family and the primary service provider. The UCP National Collaborative Infant Project (1978) called this innovative model *transdisciplinary service delivery*, which they defined as "of or relating to a transfer of information, knowledge, or skills across disciplinary boundaries" (p.1).

To become transdisciplinary, program administrators and other professionals must commit themselves to teaching, learning, and working across disciplinary boundaries. They must exchange information, knowledge, and skills so that one person, together with the family, accepts primary responsibility for carrying out the early intervention plan for the child and family.

The UCP National Collaborative Infant Project called the stages of TD team development "role release." Role release is the sum of several separate but related processes labeled role extension, role enrichment,

*Figure 2. Team Interaction*




Key:

ST —Speech Therapist
OT —Occupational Therapist
PT —Physical Therapist
RN —Registered Nurse
T —Teacher
P —Parent
PCP—Primary Care Provider
SW —Social Worker or Psychologist

*Source:* Woodruff, G., & Hanson, C. (1987). Project KAI, 77B Warren Street, Brighton, MA 02135. Funded by U.S. Department of Education, Special Education Programs, Handicapped Children's Early Education Program.

role expansion, role exchange, role release, and role support. Role release allows individual team members to carry out an intervention plan for the child and family backed by the authorization and consultative support of team members from other disciplines (UCP National Collaborative Infant Project, 1978).

Early intervention administrators and program planners interested in establishing transdisciplinary services must become familiar with the entire role release process, for it is central to the functioning of a TD team. Successful implementation of this process requires almost constant attention to team building and team maintenance activities. Without the necessary commitment from administrative staff, the TD team cannot have adequate time and support for successful role release.

*The role release process is central to the functioning of a TD team.*

### *Role Extension*

❑ Role extension is the first step team members take in the role release process as they move from an interdisciplinary to a transdisciplinary focus. In this phase of team development, professionals engage in self-directed study and other staff development efforts such as attending conferences, inservice training, and courses to increase their depth of understanding, theoretical knowledge, and clinical skills in their own disciplines. Role extension is a continuing process in which team members accept responsibility and use their resources to keep fully abreast of the latest developments in their fields. Competence in one's profession and self-confidence are necessary prerequisites for TD team members.

*Professionals engage in self-directed study and other staff development efforts.*

### *Role Enrichment*

❑ Role enrichment follows role extension. TD team members who are well versed in their own disciplines are ready to begin learning more about other disciplines. Role enrichment allows team members to develop a

general awareness and understanding of other disciplines through a process of defining terminology and sharing information about basic practices. Teams can engage in role enrichment during discussions at team meetings and after conferences. In addition, the team can create a reference library of conference notes and professional journals to share their resources, and can offer instruction to one another.

### *Role Expansion*

❑ Role expansion is the third phase of development for TD teams. In this phase, team members continue the transdisciplinary teaching/learning process by pooling ideas and exchanging information on how to make observational and programmatic judgments outside their own disciplines.

### *Role Exchange*

*Role exchange is often misconstrued as role replacement.*

❑ Role exchange occurs when TD team members have learned the theory, methods, and procedures of other disciplines and begin to implement techniques from these disciplines. Role exchange is often misconstrued as role replacement by critics of the model. A common criticism is that team members lose their professional identities on a TD team. This, however, is not the case. For example, the nurse on a TD team is not expected to become a speech therapist. Rather, what is expected on a properly functioning team is that team members expand their intervention skills. The nurse is expected to acquire some intervention skills that she is able to incorporate into her therapeutic repertoire. In this phase of the role release process, the nurse must first demonstrate these procedures to the speech therapist and later carry them out under the speech therapist's supervision. Role exchange is facilitated when team members work side by side or as buddies, and when they have sufficient indirect service time.

### *Role Release*

❑ Perhaps the most challenging component is role release. In this phase of team development, a team member puts newly acquired techniques into practice under the supervision of the team member from the discipline that has accountability for those practices.

*The family also benefits by interacting with a primary service provider.*

The team becomes transdisciplinary when team members begin to give up or "release" intervention strategies from their disciplines to one another. Because the team authorizes the primary service provider to carry out the plan that the entire team has developed, the child is handled by one staff person and the parents. The family also benefits by interacting chiefly with a primary service provider rather than with a number of specialists, thereby reducing the confusion that can result from working with a large number of staff to develop and implement the service plan. Many families of infants with special needs report that they are uncomfortable dealing with several professionals at a time, some of whom may have differing and contradictory perspectives. Having one service provider who represents the team is an aspect of the TD model that is particularly valued by families.

### *Role Support*

❑ Sometimes interventions are required by law to be provided by a specific discipline. At other times they are too complicated, too new, or simply beyond the skills of the best-trained TD primary service provider. In these cases, the team member from the identified discipline works directly with the primary service provider and the family to provide this intervention. Team members also receive role support through the continuing informal encouragement of other team members. Role support provides the necessary backup to the processes of role exchange and role release and is a critical component of the transdisciplinary approach.

*Role support provides backup to role exchange and role release.*

Sometimes, in the interests of saving professional time or increasing caseloads, transdisciplinary programs neglect to provide role support to team members. These programs deserve the criticism leveled at the TD approach—that the primary service provider attempts to become everything to every child and family. Holm and McCartin (1978) voiced this concern:

> There is a danger that the "transdisciplinary" idea could be used by solo practitioners (in whatever field) with a sprinkling of skills from a variety of child development fields to obliterate the distinction between solo practice and a team approach. ...the full array of knowledge and skills available in the child development field will never be offered by a single practitioner, however skilled. (p. 103)

In fact, the transdisciplinary approach, appropriately implemented, causes just the opposite to occur. Rather than replacing the skills of individual disciplines with one person who functions as an "unitherapist," the TD process allows individual members of the team to add to their own expertise by incorporating into their service repertoires the information and skills offered by the other members of the team.

The educator or child development specialist on the transdisciplinary team, for example, does not attempt to replace the physical therapist. Instead, the educator pools his or her information and skills with that of the physical therapist and the other team members to develop and implement an integrated service plan that takes advantage of the full range of skills that each discipline brings to the team. If the educator is the primary service provider, she or he is responsible, with the family, for carrying out the plan with role support from other team members whenever appropriate. If the child is in need of direct, "hands on" physical therapy, the physical therapist on the TD team provides this therapy as role support to the primary service provider.

*The educator does not attempt to replace the physical therapist.*

## *TRANSDISCIPLINARY PROGRAM COMPONENTS*

❑ The transdisciplinary principles of viewing child development as an integrated and interactive process, requiring team accountability and including families as team members, govern all components of a TD program (Figure 3). In order for the TD approach to be effective, administrators and team members must be thoroughly aware of how the model affects program operation and must consistently implement TD procedures throughout each phase of service delivery. In Chapter 2,

Garland and Linder describe the administrative issues that must be addressed before a program can become transdisciplinary.

Adapting the TD model to the needs and resources of an individual program can be a necessary part of developing the program's philosophy and structure. In attempting to implement the transdisciplinary model without adequate forethought or technical assistance, many programs end up with a hodgepodge of bits and pieces from all three of the early intervention team models. Unfortunately, some of the resulting program models combine the least effective, most difficult aspects of each of the three team models. In order to avoid such confusion, it is important for administrators and program planners to know how the TD model functions in each program component, so that adaptations can be carefully made and supported by a consistent program philosophy.

*It is important to know how the TD model functions in each program component.*

The TD model is not for everyone, nor for every program. Becoming transdisciplinary is not an easy process. It requires a great deal of planning, effort, time, and initially, expense. Program administrators must provide the necessary inservice time and training for the development of a TD team and the necessary indirect service time for the team to implement TD procedures. In turn, the team must adequately prepare each family for their active role as team members in assessing their own and their child's needs and in implementing and evaluating the effectiveness of their service plan.

*The team must adequately prepare each family for an active role as team members.*

In the following section, team and family roles for implementing TD intake, assessment, program planning, program implementation, and reassessment are discussed and illustrated. Some of these procedures are common to all high-quality early intervention programs. Some are unique to the TD approach. All, however, should be carefully considered by programs wanting to become transdisciplinary.

### *Intake*

❑ In many early intervention programs, one person or one discipline is responsible for bringing children and families into the program. In a TD program, however, responsibility for intake interviews or home visits may be rotated among team members or assigned as a continuing task to each team member. This shared responsibility allows all team members to participate.

*Responsiblity for intake interviews may be rotated among team members.*

Project Optimus, an Outreach project funded from 1978 to 1986 to provide transdisciplinary training, developed the following guidelines for TD team members to consider before the initial intake: (a) anticipate the family's need for information, (b) anticipate the team's need for information, and (c) plan for team feedback to each other (Woodruff, 1985). Intake procedures in a transdisciplinary program are aimed at accomplishing three goals: to establish a basis for rapport with the family and child, to gather information about the child and family, and to provide the family with information about participation in a TD program.

Establishing rapport with the family is the first task for all early intervention staff, regardless of their program's philosophical orientation. In a TD program, however, this task is critical because the family is considered a functioning member of the team.

Intake represents a family's first exposure to the early intervention program and their first opportunity to be treated as decision-making members of the team. When meeting with the family during intake, the staff member's goal is to create a warm, understanding atmosphere that

*Intake represents a family's first exposure to the early intervention program.*

*Figure 3. Components of the Transdisciplinary Model*

**INTAKE**
Responsibility rotated among team members.
Rapport established with family.
Family information and child data gathered.
Transdisciplinary model explained.

**PRE-ARENA PREPARATION**
Facilitator and coach chosen for assessment.
Case presentation provided.
Team members coach facilitator.
Team members share information across disciplines.
Staff member chosen to lead post-arena feedback to parent.

**ARENA ASSESSMENT**
Arena facilitator works with child and parents.
Team members observe all aspects of child's behavior and parent-child interaction.
Team members observe and record across all developmental areas.
Arena facilitator works to reassure parent and gain involvement.

**POST-ARENA FEEDBACK TO FAMILY**
Child's strengths and needs are established.
Family's goals and priorities are discussed.
Activities are recommended for home implementation.

**POST-ARENA DISCUSSION OF TEAM PROCESS**
Primary service provider (PSP) assignment is made.
Team evaluates assessment process and provides feedback to one another.

**IFSP DEVELOPMENT**
Team develops goals, objectives, and activities.
Parents and PSP reach consensus on which IFSP goals, objectives, and activities will be initiated first.

**ACTIVITY PLANNING**
Team establishes regular meetings to monitor the implementation of the IFSP, to assign daily or weekly activities, and to make revisions in the plan.

**PROGRAM IMPLEMENTATION**
PSP implements the plan.
Team members monitor the implementation, maintain accountability for their discipline, provide role support, and when needed, supervision.

**REASSESSMENT**
Team follows pre-arena, arena, and post-arena procedures.

**PROGRAM CONTINUES TO REPEAT CYCLE**

*Source*: Woodruff, G. & Hanson, C. (1987). Project KAI, 77B Warren Street, Brighton, MA 02135. Funded by the U.S. Department of Education, Special Education Programs, Handicapped Children's Early Education Program.

reduces parental anxiety by acknowledging the family's needs and their reasons for seeking services.

The relationship and roles established by the family and the team member during intake set the pattern for the family's future interactions with program staff. If the staff member in these initial contacts fails to convey respect for the family's ability to identify their needs and make choices for themselves and their child, it will be extremely difficult, if not impossible, for the family to later feel and act like team members. The challenge for the primary service provider is to make sure that families are able to make informed decisions based on a review of available options.

*The challenge is to make sure that families are able to make informed decisions.*

Another goal of the intake is to gather information on the child and family. Although most early intervention programs gather similar information, the method used in a TD program may more consciously involve the family in determining their needs and expectations.

Information to be gathered on the child during intake includes the presenting diagnosis, if any; a medical history; the family's perception of the child's level of functioning in each of the developmental areas, as well as of the child's learning style, temperament, motivators, and reinforcers; a developmental screening; a record of the child's involvement with other agencies or programs; and release forms for intervention.

Information to be gathered on the family includes a description of the family constellation, family support systems, family stresses and coping behaviors, the degree of family awareness of the child's condition and needs, and the family's expectations for the child's program and services. Because the TD approach requires that children be considered within the context of their families, this information is especially critical to the TD team. As the provisions of Public Law 99-457 become widely implemented in early intervention programs, such a family focus may become routine in all early intervention programs, regardless of their service delivery model.

Providing information to the family is as important as gathering information from the family. During these initial contacts, the staff member explains the TD philosophy to the family and describes how this philosophy affects all components of the child's and family's program. The role of the family on the TD team and the process of including parents as active decision makers is explained and emphasized during intake. The family's role in the assessment process, in the establishment of service priorities, and in the development of the individualized family service plan (IFSP) is presented by the staff member during intake. Program options for the family are also described.

During intake, families are prepared for the next step in the TD intervention process—the arena assessment. Informed of what to expect and how to prepare for the assessment, families are more likely to participate actively. Parents are asked, for example, to choose the best time for the assessment, bring their child's favorite toys and snack, and suggest enjoyable activities for their child, as well as be prepared to play with the child during the assessment.

*Informed of what to expect and how to prepare, families are more likely to participate actively.*

The team member doing the intake also makes it clear to families that their opinions and insights will be an important part of the assessment. Parents are asked to be prepared to talk after the assessment about their goals for their child and family and to comment on whether or not the child's behavior during the assessment represented his or her behavior in normal settings such as the home. Parents are also encouraged to bring one or more people of their choice to the assessment for moral support.

### *Assessment*

❑ In a TD program, children are assessed using an "arena" approach. In an arena assessment the family and all other team members gather together in one room to evaluate the child. All team members on a TD team observe and record every aspect of the child's behavior. In most instances only the parent and one team member, who functions as the facilitator, handle the child. This limited handling reduces the potentially disruptive effect of having several strange adults present at one time.

*All team members observe and record.*

In a traditional assessment, a child is usually exposed to a series of professionals who touch, stimulate, and interact with him or her. In an arena assessment, the child is not expected to adjust to handling by many strangers. Thus, the child's ability to perform during the arena assessment is enhanced. Because the child is required to go through only one combined assessment and adjust to interacting with only one new adult, fatigue and resistance are minimized as well.

*The child often does not adjust well to handling by many strangers.*

Having all team members observe the child's reactions and responses in all developmental areas offers many behavioral and developmental perspectives. Team members have an opportunity for rich and varied observations because they are positioned around the child, parent, and assessment facilitator. Little is missed during a well-conducted arena assessment. With a variety of team members attending, varying impressions and observations can be shared, and a synthesis of ideas evolves.

*Little is missed during a well-conducted arena assessment.*

Every member of the TD team needs to believe in the assessment process and share a sense of equal participation in and responsibility for the outcome. Arena assessments are not easy to do. Orchestrating the arena requires meticulous planning and forethought. Like the performance of an opera, a play, or a team sports event, it requires a great deal of advance planning and coordination by the team members under the guidance of a skilled and committed leader.

*Orchestrating the arena requires planning.*

Programs implementing the TD model often lack adequate training and practice in arena assessment procedures. A necessary step for teams learning to do arena assessments is first to understand the importance of this component of the model and then to obtain the commitment of the entire team to its implementation. An issue for some members evolving toward a TD approach is their uneasiness about participating in an assessment in which they to not individually work with and handle the child, or in which they do not use their standardized assessment instruments with the child one on one.

For a team to become transdisciplinary, members must be able to openly discuss these individual issues and reservations. As teams ask themselves what they need to learn during a child's assessment, they will be able to weigh the relative merits of the arena and other assessment approaches.

In planning each arena assessment, the team meets to decide who will facilitate the assessment. For some programs, the assessment facilitator is the person who conducted the intake. In other programs, this responsibility is rotated among team members.

*For some programs, the assessment facilitator is the person who conducted the intake.*

In the pre-assessment meeting, information from intake is shared with the team. The assessment facilitator is advised by the other team members about what child behaviors to look for, what assessment instruments to use, how best to elicit specific information and behavior from the child, and how best to include the family. Team members share

specific information from their own disciplines to help other team members observe child behaviors. For example, the psychologist helps other team members to be aware of emotional aspects of behavior, while the occupational therapist coaches the team to look for the interplay of sensory, motor, and cognitive skills.

The family's level of involvement in the assessment is dictated by how comfortable they feel with the process and how much they wish to involve themselves. Parents may be co-facilitators or observers, and may ask or answer questions. Families are encouraged to participate actively in the assessment by interpreting their child's responses and making suggestions about approaches the facilitator might use with the child. The following comments by parents illustrate the value of their observations during an arena assessment: "I don't think he understands that word"; "She calls it a choo-choo, not a train"; and "He could do that if he were sitting this way." The assessment facilitator must be sensitive to cues from the family and be aware of the family's concerns at all times.

*The facilitator must be aware of the family's concerns.*

As soon as the arena assessment is completed, the family and other team members share their preliminary impressions about the child's performance. This post-assessment discussion provides the family and the other team members with an opportunity to exchange their views and concerns. It also provides the family with a chance to discuss their child's strengths and needs and their priorities for services and to take home ideas for helping him.

The TD team also meets without the family after each arena assessment. At this meeting the team assesses the process, the performance of the facilitator, and each other's participation. This evaluation of team functioning is a critical component of TD staff and team development, but it can be accomplished only in an atmosphere of mutual trust and support. In the interests of saving time and increasing the number of assessments, some programs neglect this team maintenance activity. Yet a lack of attention to such team process issues as these is a frequent cause of failure for TD teams.

*Evaluation of team function is a critical component of TD staff and team development.*

A final step in a TD arena assessment is the written report. One member of the team, usually the primary service provider, organizes the information gathered from the team assessment discussions into a report that clearly summarizes the results and provides the family with a written record of the team's findings and recommendations.

The arena assessment is a major component of the TD model and is appropriate for use with most young children and their families. Rarely, however, the arena format may not be best for an individual child or family. Some children may be so sensitive or distractible that they cannot perform well in an arena. Some families may be so uneasy in the presence of more than one person at a time that they may not be willing to participate in an arena. Programs implementing the TD approach must be sensitive to these rare exceptions and be willing to alter their assessment practices accordingly.

### *Program Planning*

*An IFSP is the initial program planning step.*

❑ The development of an individualized family service plan (IFSP) as mandated by Public Law 99-457 is the initial program planning step for TD and other early intervention teams. The TD team develops the IFSP by designing goals, objectives, and activities for the child and family in all areas of concern. These are based on the child's strengths and needs

and the family's priorities and resources. Some TD programs develop the IFSP in a team meeting immediately following the assessment. Others meet again at a later time, after the assessment report has been written and shared with family and other team members.

Teams choosing to develop the IFSP at a later date may be tempted to formulate goals and objectives as they write the report. When this happens, the family members of the team are not really part of the goal development process. Instead, they may be in the position of approving goals already developed by the professional members of the team.

As members of the TD team, families determine their own level of involvement in the development of the IFSP. Some families feel most comfortable with a passive role, primarily answering the questions of other team members about their own goals for their child. Other families take a major role in IFSP development, seeking information from other team members, presenting the family's concerns and priorities, and insisting that these concerns be met. The goal of any TD program is to enable the family to choose its level of involvement. Programs can accomplish this goal by providing families with the information and support they need to make informed decisions about their participation.

*The goal is to enable the family to choose its level of involvement.*

The TD approach to program planning, which begins with the development of the IFSP, continues during regularly scheduled planning meetings. TD teams recognize that planning services for children and families is too complex a task to be accomplished entirely at the completion of an assessment or during any single meeting. Rather, the entire TD team meets regularly to monitor the implementation of the IFSP, to discuss the child and the family's response to the service plan activities, and to plan revisions as needed. These continuing team meetings in which each child and family is discussed are essential to the transdisciplinary approach. Although the team authorizes one person to carry out the IFSP along with the family, the primary service provider relies on regular consultation with and support from other team members to carry out the program successfully. At all times, the primary service provider is accountable to the team for family interventions.

### *Program Implementation*

❑ Implementation of the program plan in the transdisciplinary approach depends on the process of role release. As discussed earlier in this chapter, the primary service provider uses the information and skills offered by other team members as well as the expertise of his or her own discipline to carry out the child's program. Careful and thoughtful selection of the primary service provider is important for the success of the TD approach.

*Selection of the primary service provider is important.*

Many variables are considered in the selection of the primary service provider, including personality factors and special skills and abilities that match the needs of the child and family. Other important considerations are caseload size and composition and logistics of scheduling and transportation. Use of a primary service provider enhances rapport between the family and the staff and avoids the interference with parent/child bonding that may be caused by excessive handling of the child in the clinical setting (Haynes, 1976).

The degree of family involvement in implementing the IFSP is determined by the family itself. Some parents are immediately able to function as co-facilitators for the IFSP. Others initially choose a less active

role. Although TD program staff want families to be as fully involved as possible in implementing the IFSP, this is a choice that ultimately must be left to the family.

It is the intent of a TD program that the degree of the family's involvement results from a conscious, informed, and educated choice made from an array of possible options offered by the primary service provider. Included in this discussion with the family is the option that they may choose not to be fully involved in service delivery. Family participation in a TD program may be usefully regarded as a learning process that enables the family to move along a continuum from lesser to greater involvement as they become more familiar and comfortable with the program and the staff.

*The primary service provider meets regularly with the TD team.*

The primary service provider meets regularly with the entire TD team to discuss the implementation of the IFSP. These consultations ensure that each child and family have access to the full range of expertise of the whole team. Occasionally, however, the needs of some children and families are so complex in specific areas of disciplinary expertise that the primary service provider is not able to meet these needs, even with consultative support from other team members. In such cases, the team member from the discipline concerned provides direct therapy or intervention, together with the primary service provider and the family.

This role support is a vital component in implementing a TD service plan, yet many early intervention programs who consider themselves to be transdisciplinary do not provide for role support. In the interests of saving personnel costs, administrators sometimes eliminate the therapist positions from a program and appoint a staff member from a special or early education background to be the primary service provider. This staff member is then given some time in periodic consultation with therapists, and is expected to be responsible for single-handedly meeting the service needs of the child and family. This unfortunate arrangement does not allow individual children to receive direct therapy regardless of their needs.

Although these programs may call themselves transdisciplinary, such program practices are inimical to the TD approach. A program cannot be transdisciplinary without the presence of team members from several disciplines who share responsibility and accountability for meeting the needs of the child and family. Much misunderstanding of the TD model arises from the misapplication of the term "transdisciplinary" to describe such programs.

*Implementing the IFSP requires that the professional members of the team meet regularly.*

Another frequent problem for TD programs is that adequate team meeting time is not scheduled for case conferences. Implementing the IFSP in a TD program requires that the professional members of the team meet regularly to discuss child and family progress and problems. Individual members of the TD team cannot release the role of their disciplines unless they are assured that the primary service provider is able to implement the integrated plan developed and approved by the entire team. Primary service providers cannot use information from other disciplines well unless they receive regular advice, support, and authorization from team members in these disciplines.

Although administrators may be tempted to limit available team meeting time in order to serve more children and families, such a step is shortsighted. The quality of services provided by the TD team cannot be assured without the necessary team meeting time to reflect upon what is being offered. It should also be expected that a newly formed team or one

with several relatively inexperienced members will need more meeting time than established teams or teams with more experienced members.

***Reassessment***

❑ When it is time for a child to be reassessed, the TD team conducts another arena assessment. The frequency of reassessments varies with the individual needs of the child and the success of the IFSP. Reassessments, especially for infants, are usually no further than 6 months apart. During reassessment, staff and parents again use an arena format to carefully examine the child's and family's accomplishment of program plan objectives.

*Reassessments, especially for infants, are no further than 6 months apart.*

Following the arena assessment, the IFSP is revised by the team. This is also a time for the staff team members to assess whether or not the services they provide meet the needs of the child and family as well as their own performance standards. The team then sets goals for improving interaction, consultation, and supervision.

## *IMPLICATIONS OF THE TRANSDISCIPLINARY MODEL FOR STAFF*

❑ It is not enough for early intervention specialists to decide to form a transdisciplinary team and follow the framework just outlined. They must also be committed to the TD model and recognize the implications it has for their behavior and for the team. The TD model is most successfully accomplished when adequate care and forethought are given to the process of forming the team. Once team members are chosen, a system for continuing staff development must be designed and carried out.

*A system for continuing staff development must be designed and carried out.*

In some instances, forming the TD team means obtaining a commitment from existing staff to become transdisciplinary. In other circumstances, the program administrator will hire new staff to form the TD team. In either case, certain qualities contribute to the team's successful functioning.

Professionals who thrive on TD teams include those who enjoy working in highly interactive, fairly public group situations and who enjoy brainstorming, problem solving, and negotiating as a continuing part of their work. Most often, successful TD team members exhibit qualities of good sportsmanship. They also have the ability to tolerate a team decision that they may not completely support, but are willing to try for a time. All of these qualities are characteristic of people who are personally and professionally mature.

*Successful TD team members exhibit qualities of good sportsmanship.*

Because TD team members are interdependent, all must commit themselves to assist and support one another. This commitment is demonstrated by the following behaviors:

- Giving the time and energy necessary to teach, learn, and work across traditional disciplinary boundaries.
- Working toward making all decisions about the child and family by team consensus—that is, giving up disciplinary control.
- Supporting the family and one other team member as the child's primary service provider.
- Recognizing the family as the most important influence in the child's life and including them as equal team members who have a say in all decisions about the child's program.

*The TD team must have a strong leader.*

The TD team, like all other teams, must have a strong leader (Bennett, 1982; Holm & McCartin, 1978; Orlando, 1981). In addition to possessing all the qualities necessary for TD team members, the TD team leader must have the ability to foster a climate of mutual trust and support in which the team can thrive. The team leader must also have:

1. A belief in the transdisciplinary model and a strong commitment to making the model work.
2. The ability to listen carefully and review what is being said analytically.
3. The ability to participate in and manage a group.
4. The ability to organize and conduct meetings.
5. The ability to manage the team's time efficiently.
6. The ability to supervise staff, regardless of their disciplines.
7. The ability to facilitate decision making by consensus.
8. The ability to include families as equal team members.

*Interpersonal dynamics is a strong factor influencing behavior in group settings.*

Obviously, this list of attitudes and skills for TD team members and team leaders is not exhaustive. Interpersonal dynamics, too, is a strong factor influencing behavior in group settings. Never are two teams alike; every team has its own team issues, personality, and problems. The TD approach can only provide guidelines for forming teams and making them work well. It is up to the program administrator, team leader, and team members to have the desire and to create the atmosphere necessary for the TD approach to succeed.

## ISSUES AND CONCLUSIONS

*The TD approach sets high standards for communication and collaboration.*

❑ The TD model is one reasonable, practical, and efficient method for providing services to infants and toddlers with special needs and their families. It is not the only high-quality model for early intervention programs. The TD team approach, however, does remedy many of the problems associated with multi- and interdisciplinary approaches and does set high standards for team communication and collaboration. The family focus of the TD model is also consistent with the newest federal early intervention legislation and best practices in the field.

*The TD model has direct and immediate benefits for the child and family.*

In addition to the benefits for the team already mentioned, the TD model also has direct and immediate benefits for the child and family. From the outset of their involvement with a transdisciplinary intervention team, the family are respected team members. They are informed that their knowledge of their child and their priorities for services for themselves and for the child are important and respected. These priorities form the basis of the individualized family service plan. The family is supported, not supplanted, by the TD team because the family carries out the service plan that they have helped design.

*Parents have a great opportunity to feel invested in the program.*

Relating primarily to one service provider over the course of their involvement with the program, the family has a good opportunity to develop an intense and lasting rapport with this person. In general, parents involved with a TD program have a great opportunity to feel invested in the program and become more effective advocates for themselves and their child.

Children enrolled in a TD program benefit from having their development viewed as an integrated and interactive process. Their intervention activities are designed to fit into their normal daily routines and to address

their multiple developmental needs simultaneously. Children also benefit from having their families involved and from being required to interact primarily with only one person other than their parents. The end result of a child's participation in a TD program may be a more normal, responsive, and adaptable program plan because of the joint problem solving between the staff and family.

The TD approach recognizes that the greatest resources in any program are the families and the staff. The TD model offers early intervention professionals an opportunity to continuously evaluate the structure of their programs, their staffing patterns, and the quality of their direct services.

Vital to any high-quality program is this kind of continuing examination and refinement. The TD model offers a service delivery structure that forces a team to continually ask and seek credible answers to the question: "Are we making the most of our time and resources to best meet the needs of the children and families we serve?" But in the final analysis, the greatest joy and the pleasure of the transdisciplinary model is that it offers an ever growing and renewing positive experience for all involved—the children, the families, and the staff.

*"Are we making the most of our time and resources to best meet the needs of the children and families we serve?"*

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